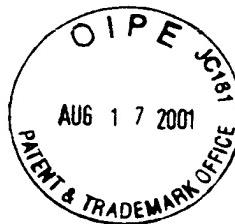


SEQUENCE LISTING

<110> KAHLERT, HELGA
 STUWE, HANS-THOMAS
 FIEBIG, HELMUT
 CROMWELL, OLIVER
 BECKER, WOLF-MEINHARD
 BUFE, ALBRECHT
 SCHRAMM, GABRIELE
 JAGER, LOTHAR
 MULLER, WOLF-DIETER



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<140> 09/381,903
 <141> 2000-04-17

<150> PCT/EP98/01507
 <151> 1998-03-16

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Val Gly Phe Lys Ala Ala Val Ala Ala Ala Ser Val Pro Ala Ala
35 40 45

Asp Lys Phe Lys Thr Phe Glu Ala Ala Phe Thr Ser Ser Ser Lys Ala
50 55 60

Ala Ala Ala Lys Ala Pro Gly Leu Val Pro Lys Leu Asp Ala Ala Tyr
65 70 75 80

Ser Val Ala Tyr Lys Ala Ala Val Gly Ala Thr Pro Glu Ala Lys Phe
85 90 95

Asp Ser Phe Val Ala Ser Leu Thr Glu Ala Leu Arg Val Ile Ala Gly
100 105 110

Ala Leu Glu Val His Ala Val Lys Pro Val Thr Glu Glu Pro Gly Met
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Ala Lys Ile Pro Ala Gly Glu Leu Gln Ile Ile Asp Lys Ile Asp Ala
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 Ala Phe Lys Val Ala Ala Thr Ala Ala Thr Ala Pro Ala Asp Asp
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 Lys Phe Thr Val Phe Glu Ala Ala Phe Asn Lys Ala Ile Lys Glu Ser
 165 170 175
 Thr Gly Gly Ala Tyr Asp Thr Tyr Lys Cys Ile Pro Ser Leu Glu Ala
 180 185 190
 Ala Val Lys Gln Ala Tyr Ala Ala Thr Val Ala Ala Pro Gln Val
 195 200 205
 Lys Tyr Ala Val Phe Glu Ala Ala Leu Thr Lys Ala Ile Thr Ala Met
 210 215 220
 Ser Glu Val Gln Lys Val Ser Gln Pro Ala Thr Gly Ala Ala Thr Val
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 Leu Ala Phe Lys Thr Phe Glu Ala Ala Phe Thr Ser Ser Ser Lys Ala
 50 55 60
 Ala Ala Ala Lys Ala Pro Gly Leu Val Pro Lys Leu Asp Ala Ala Tyr
 65 70 75 80
 Ser Val Ala Tyr Lys Ala Ala Val Gly Ala Thr Pro Glu Ala Lys Phe
 85 90 95

Asp Ser Phe Val Ala Ser Leu Thr Glu Ala Leu Arg Val Ile Ala Gly
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 Ala Leu Glu Val His Ala Val Lys Pro Val Thr Glu Glu Pro Gly Met
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 Ala Lys Ile Pro Ala Gly Glu Leu Gln Ile Ile Asp Lys Ile Asp Ala
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 Lys Tyr Ala Val Phe Glu Ala Ala Leu Thr Lys Ala Ile Thr Ala Met
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 Ser Glu Val Gln Lys Val Ser Gln Pro Ala Thr Gly Ala Ala Thr Val
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Ala Gly Lys Ala Thr Thr Glu Glu Gln Lys Leu Ile Glu Asp Ile Asn
 20 25 30

<210> 92

<211> 137

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Recombinant allergen

<400> 92

Ala Asp Ala Gly Tyr Ala Pro Ala Thr Pro Ala Ala Ala Gly Ala Ala
 1 5 10 15

Ala Gly Lys Ala Thr Thr Glu Glu Gln Lys Leu Ile Glu Asp Ile Asn
20 25 30

Val Gly Phe Lys Ala Ala Val Ala Ala Ala Ala Ser Val Pro Ala Ala
35 40 45

L^{eu} A^{la} G^{ly} A^{la} T^{yr} A^{sP} T^{hr} T^{yr} L^{ys} C^{ys} I^{le} P^{ro} S^{er} L^{eu} G^{lu} A^{la}
50 55 60

Ala Val Lys Gin Ala Tyr Ala Ala Thr Val Val Ala Ala Ala Pro Gin Val
65 70 75 80

Lys Tyr Ala Val Phe Glu Ala Ala Leu Thr Lys Ala Ile Thr Ala Met
 85 90 95

Ser Glu Val Gln Lys Val Ser Gln Pro Ala Thr Gly Ala Ala Thr Val
 100 105 110

Ala Ala Gly Ala Ala Thr Thr Ala Ala Gly Ala Ala Ser Gly Ala Ala
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Thr Val Ala Ala Gly Gly Tyr Lys Val
 130 135

<210> 93

<211> 241

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Recombinant
 allergen

<400> 93

Ala Asp Ala Gly Tyr Ala Pro Ala Thr Pro Ala Ala Ala Gly Ala Ala
 1 5 10 15

Ala Gly Lys Ala Thr Thr Glu Glu Gln Lys Leu Ile Glu Asp Ile Asn
 20 25 30

Val Gly Phe Lys Ala Ala Val Ala Ala Ala Ala Ser Val Pro Ala Ala
 35 40 45

Asp Lys Phe Lys Thr Phe Glu Ala Ala Phe Thr Ser Ser Ser Lys Ala
 50 55 60

Ala Ala Ala Lys Ala Pro Gly Leu Val Pro Lys Leu Asp Ala Ala Tyr
 65 70 75 80

Ser Val Ala Tyr Lys Ala Ala Val Gly Ala Thr Pro Glu Ala Lys Phe
 85 90 95

Asp Ser Phe Val Ala Ser Leu Thr Glu Ala Leu Arg Val Ile Ala Gly
 100 105 110

Ala Leu Glu Val His Ala Val Lys Pro Val Thr Glu Glu Pro Gly Met
 115 120 125

Ala Lys Ile Pro Ala Gly Glu Leu Gln Ile Ile Asp Lys Ile Asp Ala
 130 135 140

Ala Phe Lys Val Ala Ala Thr Ala Ala Gly Gly Ala Tyr Asp Thr Tyr
 145 150 155 160

Lys Cys Ile Pro Ser Leu Glu Ala Ala Val Lys Gln Ala Tyr Ala Ala
 165 170 175

Thr Val Ala Ala Ala Pro Gln Val Lys Tyr Ala Val Phe Glu Ala Ala
 180 185 190

Leu Thr Lys Thr Ile Thr Ala Met Ser Glu Val Val Gln Lys Val Ser Gln
 195 200 205

Pro Ala Thr Gly Ala Ala Thr Val Ala Ala Gly Ala Ala Thr Thr Ala
 210 215 220

Ala Gly Ala Ala Ser Gly Ala Ala Thr Val Ala Ala Gly Gly Tyr Lys
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Val

<210> 94

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 94

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<210> 95

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 95

gaacgctagc gccgcaggaa cgctggc

27

<210> 96

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 96

gcgctagcgt tcaagacctt cgag

24

<210> 97

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer



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